## ART. XXXVI.—Patents and their Utilization. By Thomas Harrison, Esq.

[Read 8th April, 1872.]

That it is not desirable that patent laws should be abolished, will appear, I think, from the following considerations:—

Ist. Advantages secured under the circumstances of such abolition—that is by each inventor hiding from the public what he had discovered—must, of necessity, be often distributed in an unequal and unsatisfactory manner. A discoverer would reap his reward, not as a result of his having conferred a benefit upon society, but as a consequence of his discovery being of such a kind that its nature could be easily concealed.

2nd. A system of trade-secrets has decidedly a demoral-

izing tendency.

3rd. The system of protection by secret is decidedly inimical to public interests. An illustration of this is given in an article relative to patent laws, appearing in the *Mechanics Magazine* for August, 1865, p. 96. A Mr. Bessemer, some twenty-five years previously, had commenced the secret manufacture of bronze powder by machinery. His machines produced the article at a cost of six, which, by hand-labour, was made and sold for eighty, shillings per lb.; and even then, nine years after the patent would have expired, the material could be sold for one-third of the price he was making, and yet yield ordinary profits! The public is now entirely ignorant of his method of manufacture, the article is comparatively little used, and the high prices are maintained.

4th. It is not the public alone that suffers by such a system; the possessors of the hidden secret are often sufferers likewise; or, at any rate, they often fail to reap the benefits that might accrue to them, were their own empirical and concealed processes open to be investigated and improved upon by science, and by better workmen than themselves.

The expediency of recognizing the rights of invention is acknowledged by many objecting to the present system, only the methods of rewarding suggested in the majority of instances are not a little singular. Among these is that proposed by the late Mr. Brunel, who, before a select com-

mittee of the House of Lords appointed to inquire into the working of the Patent Laws, said, "I believe it would be better for all parties, employer and employed, inventor and practical man, if patent rights were abolished. If a workman, who thinks he has discovered a new process, would go to his master, divulging his secret, the master might reward him with £1 or £5, and the man would be able to go about something else."

Setting aside that this would be simply instituting a system of trade secrets in a modified form—the secret being in the hand of the master and the man, not the man alone; it lies open to the very serious objection, that the reward given would scarcely ever satisfy the person who received it.

John Stuart Mill, alluding to this subject, speaks of the advisability of substituting, for patent rights, a system of public rewards to those who had really developed some really useful invention. It is questionable, however, whether any such system might not prove altogether impracticable on an extended scale. The decision upon the merits of all the patents deposited in England, France, or America, would prove a task at once Herculean and invidious; and no amount of fairness displayed, in respect to conclusions arrived at, could possibly prevent suspicions of favouritism existing to an extent that would inevitably prove an evil to the community.

Some argue against patents that the present laws benefit no one but the capitalist who purchases the invention, and that the real inventor generally remains a poor man. At present, the capitalist, there is no doubt, tries to make the best possible bargain; but let him be ever so anxious to do so, he cannot adopt a legally-registered invention, for which he is in treaty, until the person treating with him is a consenting party. On the other hand, were there no patent laws, the moment a secret was in the hands of the capitalist such person might show the inventor to the door, taking advantage of the discovery and avoiding everything

in the shape of payment at the same time.

It is further urged that inventions are seldom single; that when any person makes a discovery he is generally only one of many who have been contemporaneously pursuing the same inquiries, and have, perhaps independently of each other, each arrived at the same result. In such a case the granting of a patent rewards the one, leaving the claims of the other's altogether unrecognized. The case appears a hard

one, but at the same time seems to be a stern necessity. all natural and in all human laws we find parallel cases.

Those persons who object to patent rights on the ground that all monopolies ought to be abolished, are best answered by the statement that a patent right is no monopoly at all; but merely an arrangement—to use the words of J. Stuart Mill—"by which the originator of an improved process is allowed to enjoy, for a limited period, the exclusive privilege of using his own improvement. This is not making the commodity dear for his benefit, but merely postponing a part of the increased cheapness, which the public owe to the inventor, in order to compensate and reward him for the service." The Government, in fact, buys the invention for the public benefit, and the temporary privilege conceded to the originator is the price received by him for his secret.

Taking this view of the case governments are especially careful that before a patent is issued the nature of the invention, for which it is granted, shall be so explicitly and plainly stated by the patentee that "any ordinary skilled workman shall be able to make the patent article, at the expiration of the term, by simply following the directions given, without following contrivances of his own." This, then, is the real object of the specification, which is not, as many persons imagine, a mere definition necessarily deposited that the patentee may be enabled to indicate before a court of law that his invention has been adopted by some

one else.

Patent specifications being of this nature, the patent office of a country becomes the depository of a vast amount of technical information of the very highest importance to those interested in the advancement of art, science, and manufactures. As an example, between the years 1711 and 1852 specifications accumulated in the English patent-office to the number of 12,977, and since that period the rate of increase has varied from two to between three and four thousand annually. In this collection are records of Watt's steam-engine, Arkwright's loom, and other important contrivances too numerous to be specified. To utilize this mass of information, the English Government commenced, some twenty years since, the careful indexing and publication of all specifications, &c., in their custody; a plan which has been followed up by the authorities in many other

Besides these publications, yet other means of disseminat-

ing scientific information are resorted to, by the English and American Governments, through the mediumship of the patent-office machinery. Attached to the London office is an extensive museum of models, specimens, &c., together with a library containing upwards of twenty thousand volumes. The cognate department at Washington, also, has its library open to the public, laboratories for the use of officials, and last, but not least, an immense museum, one of the lions of the city.

Following the example of these several countries, the Government of Victoria has not remained idle with respect to the issue of a similar kind of facts. During the period elapsing between 1854 and 1866, 999 specifications had accumulated in the Melbourne office. These were supplemented in 1867, 68, 69, 70 and 71 by 99, 125, 139, 119 and 133 respectively. By the last list issued in the Government Gazette, the total number up to the present date is 1,616, besides some twenty others enrolled under the old law.

The arrangement of the Victorian subject matter Index, however, was somewhat modified; a very brief description of the nature of the invention, omitted in the corresponding English Index, being inserted to facilitate the making of searches. This plan was carried out until the issue of the last volume (the Index for 1869), when the descriptions were omitted in the subject matter, and much longer ones inserted in the Chronological, now termed the Chronological and Descriptive Index. To this latter diagrammatic drawings are now attached, so that the difficulty of making searches, for

any given invention, is now reduced to a minimum.

In the publication of specifications by the Victorian Government a plan has been adopted differing somewhat from both the English and the American systems. The specifications are often necessarily somewhat shortened, but never to such an extent but that every item of important information in the original is conveyed to the reader. In cases wherein the original is only moderately concise the words of the patentee are allowed to stand, the stereotyped beginning and ending of the specification as a legal document being alone omitted. When the original is unnecessarily lengthy much extraneous matter is left out; but only in cases wherein it is quite certain that the patentee's meaning is clearly understood, and that the abridgement in every respect conveys such meaning without the possibility of misconstruction.

